

## CLAIMS

1. A male connector (RMI) and a female connector (RFI) to be assembled and to be locked together in order to create a liquid transmission connection in the area of medical coupling, in which standardised male connectors (RMN) and female connectors (RFN) are currently used, in particular for an enteral nutrition line, with the female connector (RFI) having as the standardised female connector (RFN) a head (13 ; 14) that forms a conical entry conduit (15 ; 16) and which has an external thread (19 ; 20), and with the male connector (RMI) having as standardised male connector (RMN) a projecting conical tube (1 ; 2) that forms an entry conduit (3 ; 4), surrounded by a collar (7 ; 8) which forms a channel (9 ; 10) around the tube, and which has an internal thread (11 ; 12), with the head of the female tube (RFI) being capable of penetrating into the channel of the male connector (RMI), with the head of the male tube (RMI) being capable of penetrating, with lateral sealing, into the entry conduit of the female connector (RFI), and with the threads of the two connectors being capable of fitting together so as to lock the assembly, characterised in that these connectors (RMI, RFI) have an entry diameter and a diameter at the crest of the threads

that are chosen in relation to the corresponding diameters of the standardised connectors (RMN, RFN), so that the assembly of a male connector (RMI) or female connector (RFI) with a standardised female connector (RFN) or standardised male connector (RMN) respectively, is prevented because penetration of the ferrule of the male connector into the entry conduit of the female connector is impossible or because this penetration is halted by the head of the female connector butting against the collar of the male connector.

2. Connectors (RMI, RFI) according to claim 1, in which the entry conduits (15 ; 16 - 3 ; 4) have a taper other than 6% (the Luer taper).

3. Connectors (RMI, RFI) according to claim 2, in which the entry conduits (15 ; 16 - 3 ; 4) have a taper falling within the range 4% and 8 - 10%.

4. Connectors (RMI, RFI) according to one of claims 1 to 3, in which the conical entry conduits (15 ; 16 - 3 ; 4) have a length of 6.5 mm.

5. Connectors (RMI, RFI) according to one of claims 1 to 4, in which the threads are double threads with a pitch of 5 mm.

6. Connectors (RMI, RFI) according to one of claims 1 to 5, in which the male connector (A) has an entry diameter of 3.2 mm and a diameter at the crest of the threads of 5.8 mm and in which the female connector (B) has an entry diameter of 3.5 mm and a diameter at the crest of the threads of 6.8 mm.

7. Connectors (RMI, RFI) according to claim 6, in which the male connector (A) has a diameter of 7 mm at the base of the threads.

8. Connectors (RMI, RFI) according to claim 6, in which the female connector (B) has a diameter of 5.6 mm at the base of the threads.

9. Connectors (RMI, RFI) according to one of claims 1 to 5, in which the male connector (C) has an entry diameter of 4.5 mm and a diameter at the crest of the threads of 7.4 mm, and in which the female connector (D) has an entry diameter of 4.8 mm and a diameter at the crest of the threads of 8.2 mm.

10. Connectors (RMI, RFI) according to claim 9, in which the male connector (C) has a diameter of 8.4 mm at the base of the threads.

11. Connectors (RMI, RFI) according to claim 12, in which the female connector (D) has a diameter of 7.2 mm at the base of the threads.

12. Connectors (RMI, RFI) according to one of claims 1 to 11, which have rear channels (5 ; 6, 17 ; 18) that allow attachment of the connectors to tubes.

13. A container fitted with a female connector (RFI) as described in one of claims 1 to 11.

14. A container according to claim 13, from the group composed of a sachet, a flask, a bottle, or a syringe.

15. An enteral nutrition force-feeder, fitted with a female connector (RFI) as described in one of claims 1 to 11.

16. A syringe equipped with a pipette for the take-up of enteral nutrition products, fitted with a male connector (RMI) as described in one of claims 1 to 11.

17. A probe which has a connecting end composed of or equipped with a female connector (RFI) as described in one of claims 1 to 11.

18. A tube which has one end equipped with a male connector (RMI) according to one of claims 1 to 11, and an

opposite end equipped with a female connector (RFI) according to one of claims 1 to 11.

19. A connector which has one end composed of a female connector (RFI) according to one of claims 1 to 11, and another end which is capable of connecting to an enteral feed container.

20. A three-way connector in which one channel is fitted with a male connector (RMI) according to one of claims 1 to 11, with each of the other two channels being equipped with a female connector (RFI) according to one of claims 1 to 11.

21. A three-way connector in which one channel is fitted with a female connector (RFI) according to one of claims 1 to 11, with each of the other two channels being equipped with a male connector (RMI) according to one of claims 1 to 11.

22. Enteral nutrition lines fitted with a male connector (RMI) and a female connector (RFI) according to one or more of claims 1 to 11.

23. A set of connectors that include the standardised connectors (RMN, RFN) as specified in the table, and also connectors according to the invention (RMI, RFI) as specified in the table.